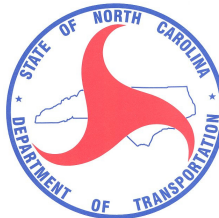


# ANNUAL REPORT FOR 2009



**Shoe Heel Creek Mitigation Site  
Robeson County  
TIP No. B-4248**



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June 2009

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## **SUMMARY**

The Shoe Heel Creek Mitigation Site is located in Robeson County. The site was planted in March 2006 and was designed as mitigation for wetland impacts associated with bridge project B-4248.

The mitigation encompasses approximately 0.16 acres of wetland restoration. The restoration effort involved the removal of the old existing roadway fill and monitoring the area to ensure that it re-attains wetland jurisdictional status. Hydrologic monitoring is not required for this project; however, vegetation monitoring is required for three years.

The site grading limits were adjusted slightly after meeting on-site with the Army Corps of Engineers. The adjustment was made to preserve mature baldcypress trees located onsite.

A portion of the site was inadvertently mowed after completing last year's monitoring. This portion was replanted on February 2, 2009. NCDOT continued monitoring for a fourth year of monitoring in 2009. The Shoe Heel Creek site shows by visual observation that the planted species are surviving and that the impacted area is re-attaining wetland jurisdictional status.

NCDOT proposes to discontinue vegetation monitoring at the Shoe Heel Creek Site.

## **1.0 INTRODUCTION**

### **1.1 Project Description**

The Shoe Heel Creek Mitigation site is located at Bridge No. 170 on SR 1101 (Figure 1). The site consists of approximately 0.16 acres of mitigation for wetland impacts associated with project B-4248.

### **1.2 Purpose**

In order for a mitigation site to be considered successful, a site must meet vegetation success criteria. This report details the vegetation monitoring in 2009 at the Shoe Heel Creek Mitigation Site. Hydrologic monitoring was not required for the site.

### **1.3 Project History**

March 2006	Site planted
July 2006	Vegetation Monitoring (1 year)
July 2007	Vegetation Monitoring (2 year)
July 2008	Vegetation Monitoring (3 year)
February 2009	Mowed Area Replanted
June 2009	Vegetation Monitoring (4 year)

## **2.0 VEGETATION: SHOE HEEL CREEK MITIGATION SITE (YEAR 4 MONITORING)**

### **2.1 Success Criteria**

Success Criteria states that the impacted area where the old existing roadway fill was removed shall be replanted using native species and must re-attain wetland jurisdictional status at the end of three years.

### **2.2 Description of Species**

The following wetland species were planted in the Wetland Restoration Area:

*Taxodium distichum*, Baldcypress

*Nyssa sylvatica* var. *biflora*, Swamp Blackgum

### **2.3 Results of Vegetation Monitoring**

A portion of the site was inadvertently mowed after completing last year's monitoring. This portion was replanted on February 2, 2009. The impacted area where the old existing roadway fill was removed and revegetated is re-attaining wetland jurisdictional status and the planted species are surviving.

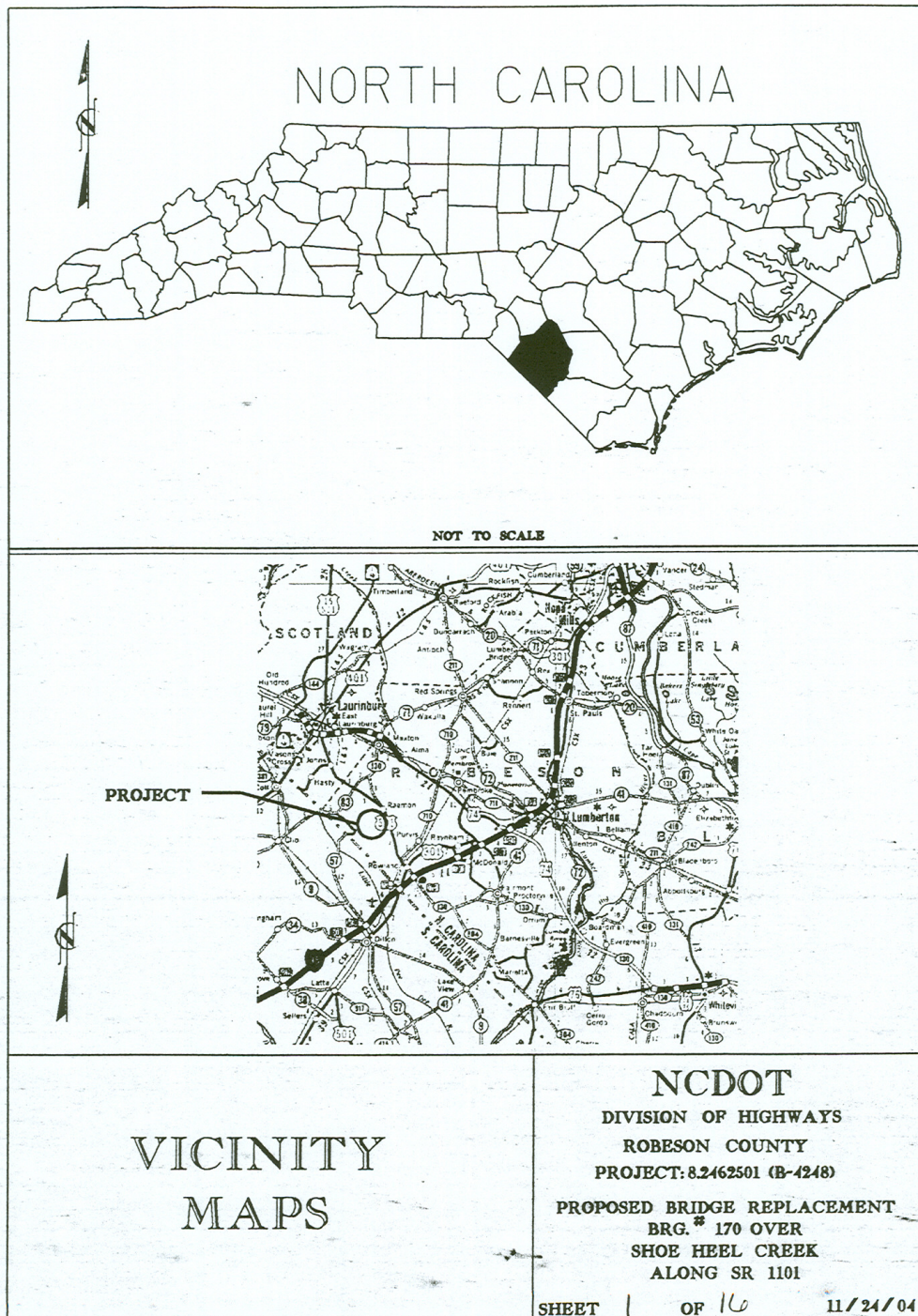
**Site Notes:** Other species noted include: red maple, fennel, goldenrod, ragweed, cattails, *Scirpus* sp., lespedeza, tulip poplar, pine, *Juncus* sp., wax myrtle, black willow, and various grasses. Water was standing on site at the time of monitoring.

### **2.4 Conclusions**

There were approximately 0.16 acres of wetland restoration planted on site. There was no vegetation plots established on the site. By visual observation, the Shoe Heel Creek site shows that the planted species are surviving and that the impacted area is re-attaining wetland jurisdictional status.

## **3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS**

NCDOT proposes to discontinue vegetation monitoring at the Shoe Heel Creek Site.



**Figure 1. Site Location Map**

**APPENDIX A**

**SITE PHOTOS**



# Shoe Heel Creek



Photo 1



Photo 2